AMENDMENTS TO THE CLAIMS

1. (Currently Amended)   A method for use by a storage switch in a storage network, the method comprising:

(a) receiving a plurality of packets by the storage switch, wherein the plurality of packets includes data packets and storage control packets for controlling storage management and routing of data packets between an initiator and a storage device;

(b) classifying packets as data packets or storage control packets comprising connection requests or storage management requests ~~for controlling the storage switch~~;

(c) communicating the storage control packets to a first device that controls the storage switch using said storage control packets and the data packets to a second device, and

wherein said step of classifying is performed without buffering of the packets.

2. (Original) The method of claim 1, wherein the data packets form a data request, wherein the data request includes at least some of the group including a read command, a write command, a ready-for-transfer indicator, read data, write data, and a response indicator.

3. (Previously Amended) The method of claim 2, wherein a ready-for-transfer indicator is either an R2T PDU or FCP_XFR_RDY IU.

4. (Original) The method of claim 1, wherein the first device is a CPU.

5. (Previously Amended) The method of claim 1, wherein the first device and the second device are both included in the storage switch.

6. (Original) The method of claim 1, wherein the second device is a packet processing unit.

7. (Original) The method of claim 1, wherein the second device is a fabric.

8. (Original) The method of claim 1, wherein the second device is external to the switch.

9. (Original) The method of claim 1, wherein data packets include those packets that are for an established connection, that are for a recognized protocol, and that are data moving packets.

10. (Original) The method of claim 9, wherein data moving packets include any group of at least one packet that forms any one of a read command, a write command, a ready-for-transfer indicator, write data, read data, or a response indicator.

11. (Previously Amended) The method of claim 1, wherein the step of communicating includes utilizing a local header for the packet, wherein the local header includes information indicating if the packet is a data packet or a storage control packet.

12. (Original) The method of claim 1, wherein prior to communicating the data packets to a second device, processing the data packets in accordance with a virtualization function.

13. (Previously Amended) The method of claim 1, wherein steps (a) – (c) are performed by said storage switch.

14. (Previously Amended) The method of claim 1, wherein said classifying is performed at wire speed.

15. (Previously Amended) The method of claim 1, wherein steps (a) – (c) are performed by a storage processor in the storage switch.

16. (Currently Amended) A method for use by a storage switch in a storage network, the method comprising:

(a) receiving a plurality of packets by the storage switch;

(b) classifying the packets into data packets and storage control packets comprising connection requests or storage management requests for controlling storage management and routing of data packets between an initiator and a storage device;

(c) communicating to a CPU only those packets classified as storage control packet;

(d) controlling the storage switch by said CPU and said storage control packets; and

wherein said step of classifying is performed without buffering of the packets.

17. (Previously Amended) The method of claim 16, wherein the data packets form a data request, wherein the data request includes at least one of the group including a read command, a write command, a ready-for-transfer indicator, read data, write data, and a response indicator.

18. (Original) The method of claim 16, wherein data packets include those packets that are for an established connection, that are for a recognized protocol, and that are data moving packets.

19. (Original) The method of claim 18, wherein data moving packets include any group of at least one packet that forms any one of a read command, a write command, a ready-for-transfer indicator, write data, read data, or a response indicator.

20. (Original) The method of claim 16, further including communicating to a second device those packets classified as data packets.

21. (Original) The method of claim 20, further including, prior to communicating data packets to a second device, processing the data packets in accordance with a virtualization function.

22. (Previously Amended) The method of claim 16, wherein steps (a) - (d) are performed at wire speed.

23. (Previously Amended) The method of claim 16, wherein steps (a) - (d) are performed by a storage processor in the storage switch.

24. (Currently Amended) A method for use in a storage network, the method comprising:
  (a) receiving a plurality of packets by a linecard of a storage switch that routes data packets between an initiator and a storage device in the network;
  (b) identifying, by an identifier unit on the linecard, each packet as a data packet or a storage control packet comprising a connection request or a storage management request for controlling the storage switch for storage management and routing of data packets between the initiator and the storage device;
  (c) communicating storage control packets to a CPU on the linecard, the CPU controlling the storage switch for said storage management and routing;
  (d) communicating data packets to a second device for further processing; and

wherein said identifying is performed without buffering.

25. (Original) The method of claim 24, wherein:

the plurality of packets form a plurality of requests; and

identifying includes identifying packets as part of a data request or not part of a data request, wherein the data request includes at least some of the group including a read command, a write command, a ready-for-transfer indicator, read data, write data, and a response indicator.

26. (Original) The method of claim 24, wherein the second device is on the linecard.

27. (Original) The method of claim 24, wherein the second device is external to the linecard.

28. (Original) The method of claim 24, further including, prior to communicating data packets to a second device, processing the data packets in accordance with a virtualization function.

29. (Original) The method of claim 24, wherein the identifier unit is a storage processor unit.

30. (Previously Amended) The method of claim 24, wherein said identifying is performed at wire speed.

31. – 43. (Cancelled)

44. (Currently Amended) A linecard for use in a storage switch in a storage network for routing data packets between an initiator and a storage device, the linecard comprising:

a CPU;

a classifier, the classifier coupled to the CPU, the classifier designed to classify packets without buffering as data packets and as storage control packets <u>comprising connection requests or storage management requests</u> for controlling storage management and routing of data packets between the initiator and the storage device, and to communicate the storage control packets for controlling the storage switch to the CPU and the data packets to a second device.

45. (Original) The linecard of claim 44, wherein the second device is on the linecard.

46. (Original) The linecard of claim 44, wherein the second device is external to the linecard.

47. (Original) The linecard of claim 44, wherein data packets include those packets that are for an established connection, that are for a recognized protocol, and that are data moving packets.

48. (Previously Amended) The linecard of claim 44, wherein the classifier is designed to insert into a local header an indicator of whether the packet is a data or a storage control packet.

49. (Original) The linecard of claim 44, wherein the classifier is a storage processor unit.

50. (Currently Amended) A switch for use in a storage network, the switch comprising:

a linecard, comprising:

a first device;

classification means for classifying packets, without buffering, into data packets and into control packets <u>comprising connection requests or storage management requests</u> for controlling ~~the switch for~~ storage management and routing of data packets between an initiator and a storage device, and for communicating control packets to the first device for controlling said switch and communicating data packets to a second device.

51. (Original) The switch of claim 50, wherein the second device is on the linecard.

52. (Original) The switch of claim 50, wherein the second device is external to the linecard.

53. (Original) The switch of claim 50, wherein the classification means classifies a packet as a data packet if the packet is for an established connection with a device external to the switch, is for a recognized protocol, and is a data moving packet, and otherwise the classification means classifies the packet as a control packet, wherein the data moving packet includes any one of a read command, a write command, a ready-for-transfer indicator, write data, read data, and a response indicator.

54. – 63. (Cancelled)